

1. A method of printing comprising:
  - partitioning a half-toned black bit map into a plurality of N-pixel tiles, each N-pixel tile having a marked pixel count M, and wherein the half-toned black bit map is produced pursuant to a predetermined half-toning procedure;
  - for each N-pixel tile, determining whether an N-pixel tile comprises a portion of a half-toned uniform region;
  - generating a candidate pixel array comprising a plurality of N-pixel candidate tiles respectively associated with the N-pixel image tiles, wherein an N-pixel candidate tile includes marked pixels only if the associated N-pixel image tile comprises a portion of a half-toned uniform region and the number of marked pixels in the associated N-pixel image tile is at least a predetermined percentage of N, and wherein the number of marked pixels in some of N-pixel candidate tiles having marked pixels is less than the marked pixels of the associated N-pixel image tile;
  - printing black at pixel locations identified by the black bit-map;
  - and
  - printing a non-black color at selected ones of pixel locations identified by the candidate pixel array.
2. The method of claim 1 wherein an N-pixel candidate tile having marked pixels comprises a subset of an associated N-pixel image tile that comprises a portion of a half-toned uniform region.
3. The method of claim 1 wherein an N-pixel candidate tile having marked pixels comprises a subset of an associated N-pixel image tile and includes fewer marked pixels than such associated N-pixel image tile if such associated N-pixel tile includes less than about  $0.8N$  marked pixels.

4. The method of claim 1 wherein each N-pixel image tile includes an associated pixel darkening sequence that is employed when the N-pixel image tile comprises a portion of a half-toned uniform region, and wherein each of the N-pixel candidate tiles that include marked pixels is marked in substantially the same pixel darkening sequence as an associated image tile, and wherein some of the N-pixel candidate tiles are marked to less dark levels than the associated image tiles.

5. The method of claim 1 wherein determining whether an N-pixel image tile comprises a portion of a half-toned uniform region comprises comparing an N-pixel image tile with an associated N-pixel reference tile that comprises a half-toned binary pattern that would be produced by the predetermined half-toning procedure for such N-pixel tile if the portion of the original data that resulted in such N-pixel tile were of uniform lightness.

6. The method of claim 1 wherein determining whether an N-pixel image tile comprises a portion of a half-toned uniform region comprises comparing an N-pixel image tile with an associated N-pixel reference tile that comprises a half-toned binary pattern that would be produced by the predetermined half-toning procedure for such N-pixel tile if the portion of the original data that resulted in such N-pixel tile were of uniform lightness, wherein the N-pixel reference tile includes the same number of marked pixels M as the N-pixel tile to which it is being compared.

7. The method of claim 1 wherein the predetermined percentage is in the range of about 50 percent to about 80 percent.

8. The method of claim 1 wherein the predetermined percentage is in the range of about 70 percent to about 80 percent.

9. The method of claim 1 wherein the predetermined percentage is about 80 percent.

10. The method of claim 1 wherein an N-pixel candidate tile having marked pixels represents a portion of a half-toned uniform region.

11. The method of claim 1 wherein the number of marked pixels in an N-pixel candidate tile having marked pixels is a function of a number by which the number of marked pixels of the associated N-pixel image tile exceeds the predetermined percentage of N.

12. The method of claim 1 wherein printing a non-black color comprises printing at least one of cyan, magenta and yellow at selected ones of pixel locations identified by the candidate pixel array.

13. The method of claim 1 wherein printing a non-black color comprises printing only one of cyan, magenta and yellow at selected ones of pixel locations identified by the candidate pixel array.

14. A method of printing comprising:

partitioning a half-toned black bit map into a plurality of N-pixel tiles, each N-pixel tile having a marked pixel count M, and wherein the half-toned black bit map is produced pursuant to a predetermined half-toning procedure;

for each N-pixel tile, determining whether an N-pixel tile comprises a portion of a half-toned uniform region;

generating a candidate pixel array comprising a plurality of N-pixel candidate tiles respectively associated with the N-pixel image tiles, wherein an N-pixel candidate tile includes marked pixels only if the associated N-pixel image tile comprises a portion of a half-toned uniform region and the number of marked pixels in the associated N-pixel image tile is at least a predetermined percentage of N, and wherein the number of marked pixels in some of the N-pixel candidate tiles is less than the marked pixels of the associated N-pixel image tile;

ANDing the candidate pixel array with a predetermined first non-black color pixel pattern to produce a first non-black color candidate pixel array;

ANDing the candidate pixel array with a predetermined second non-black color pixel pattern to produce a second non-black color candidate pixel array;

ORing the first non-black color candidate pixel array with a first non-black color bit-map to produce a modified first non-black color bit map;

ORing the second non-black color candidate pixel array with a second non-black color bit-map to produce a modified second non-black color bit map;

printing black at pixel locations identified by the black bit-map;

and

printing the first non-black color at pixel locations identified by the modified first non-black color bit-map; and

printing the second non-black color at pixel locations identified by the modified second non-black color bit-map.

15. The method of claim 14 wherein an N-pixel candidate tile having marked pixels comprises a subset of an associated N-pixel image tile that comprises a portion of a half-toned uniform region.

16. The method of claim 14 wherein an N-pixel candidate tile having marked pixels comprises a subset of an associated N-pixel image tile and includes fewer marked pixels than such associated N-pixel image tile if such associated N-pixel tile includes less than about  $0.8N$  marked pixels.

17. The method of claim 14 wherein each N-pixel image tile includes an associated pixel darkening sequence that is employed when the N-pixel image tile comprises a portion of a half-toned uniform region, and wherein each of the N-pixel candidate tiles that include marked pixels is marked in substantially the same pixel darkening sequence as an associated image tile, and wherein some of the N-pixel candidate tiles are marked to less dark levels than the associated image tiles.

18. The method of claim 14 wherein determining whether an N-pixel image tile comprises a portion of a half-toned uniform region comprises comparing an N-pixel image tile with an associated N-pixel reference tile that comprises a half-toned binary pattern that would be produced by the predetermined half-toning procedure for such N-pixel tile if the portion of the original data that resulted in such N-pixel tile were of uniform lightness.

19. The method of claim 14 wherein determining whether an N-pixel image tile comprises a portion of a half-toned uniform region comprises comparing an N-pixel image tile with an associated N-pixel reference tile that comprises a half-toned binary pattern that would be produced by the predetermined half-toning procedure for such N-pixel tile if the portion of the original data that resulted in such N-pixel tile were of uniform lightness, wherein the N-pixel reference tile includes the same number of marked pixels M as the N-pixel tile to which it is being compared.

20. The method of claim 14 wherein the predetermined percentage is in the range of about 50 percent to about 80 percent.

21. The method of claim 14 wherein the predetermined percentage is in the range of about 70 percent to about 80 percent.

22. The method of claim 14 wherein the predetermined percentage is about 80 percent.

23. The method of claim 14 wherein an N-pixel candidate tile having marked pixels represents a portion of a half-toned uniform region.

24. The method of claim 14 wherein the number of marked pixels in an N-pixel candidate tile having marked pixels is a function of a number by which the number of marked pixels of the associated N-pixel image tile exceeds the predetermined percentage of N.

25. The method of claim 14 wherein printing black is performed prior to printing the first non-black color and, printing the second non-black color.

26. The method of claim 14 wherein printing black is performed after printing the first non-black color and printing the second non-black color.